

Claim 13 (Amended)

The navigation system as defined in claim 10 [claimed in one of the preceding claims]
wherein the position determination means contain a receiver for satellite data (6).

Claim 14 (Amended)

The navigation system as defined in claim 10 [claimed in one of the preceding claims,]
wherein position determination is carried out by means of integrated navigation.

Claim 15 (Amended)

The navigation system as defined in claim 10 [claimed in one of the preceding claims],
wherein the navigation system contains an audio output unit (4) and the traffic restrictions are
output audibly.

REMARKS

Generally, the present invention concerns a navigation system for a motor vehicle in which travel information is stored in the system's storage element. More particularly, the present system stores information about traffic restrictions, such as the height, width or length restrictions and/or traffic restrictions for particular types of vehicles. At least one, or as many as may be applicable restrictions are displayed in the vehicle in order that the driver is able at any time to find out about the currently applicable traffic restrictions by looking at the visual output unit of the navigation system. In the present system, a monitor 3 is utilized to provide a visual display of the relevant traffic restrictions to the driver.

Claim 1 stands rejected under 35 U.S.C. 103(a) as unpatentable over the admitted prior art in view of Desai et al., U.S. Patent 5,862,509, which issued January 19, 1999.

The Office Action states that the known prior art fails to teach storing information about traffic restrictions where the relevant restrictions are displayed on the display unit. To overcome

this deficiency, Desai et al. '509 is stated to teach a navigation system for a motor vehicle wherein traffic restrictions are stored in a memory and displayed on a display unit. Applicant has reviewed the Desai et al. reference carefully and respectfully suggests that Desai et al. fails to show a system in which motor vehicle traffic restrictions are displayed on a display unit. The columns and lines referred to by the Examiner in paragraph 8 of the Official Action, specifically column 1, lines 41-46 and Figure 11 do not indicate that there is any disclosure in Desai et al. of a system wherein traffic restrictions are displayed on a monitor. Therefore, the rejection based upon the combination of the admitted prior art and Desai et al. is respectfully traversed.

In the disclosure in column 1 of the Desai et al. specification, reference is made to restrictions such as timed vehicle restrictions ("TVRs"), timed turn restrictions ("TTRs") and timed lane restrictions ("TLRs"). The entire thrust of the Desai et al. invention is to provide a system in which, among other forms of information, the traffic restrictions are utilized within the system to develop an optimal route between a point of origin and a point of destination. The information relating to restrictions is discussed solely in terms of time and the effect that the various traffic restrictions has upon the time of the trip being planned by the automotive operator. In speaking about the questions relating to the timing of TTRs, TLRs, etc., Desai et al. states beginning in line 24, of column 2:

"These questions are addressed and answered by the invention, which provides methods and apparatus for (i) route planning and optimization before a trip begins and (ii) recalculation of the remainder of the route where a traffic incident or other anticipated traffic barrier is encountered en route that interferes with the use of the originally planned route. This invention takes account of the presence of known timed turn restrictions and/or known timed lane restrictions and the possibility of a relatively new TTR or TLR may appear that has not been incorporated in the route planning process. Optimum route determination can be performed initially, before a trip begins, and may be (re)performed en route in response to encountering new traffic conditions, by incorporating the

effect(s) of the presence of another TTR and/or TLR or an unanticipated traffic barrier. Computations to (re)determine an optimum vehicle route can be performed on the vehicle or at a central station, or can be shared between the vehicle and central station."

It is quite apparent from the preceding quoted language that the Desai et al. invention is one that is not concerned with showing on a screen visible to the operator the various traffic restrictions that are present or that may become present but merely to utilize the information relating to these restrictions in optimizing the route between departure and arrival locations. In the disclosure, starting line 8, column 12 of the specification, the apparatus 250 that is used to practice the invention is stated to include a visual display which can be a computer screen or monitor that is controlled by signals received from microprocessor 261. Continuing, the information that is stated to be made viewable are the (1) present time and/or date, (2) present location of the apparatus 250, displayed by alpha, numerical coordinates, by street or road address, or by graphical display of the apparatus present location on an electronic map on a screen; (3) route data received for route planning purposes; (4) optimize route or route remainder, displayed by alpha-numerical description of the route segments or links to be used and the order of use of the links, or by graphical display of the optimal route or relevant portion of the optimal route.

It is apparent from the itemization of the information set forth in the specification that there is no display of information relating to traffic restrictions. Further, paragraph 6 of claim 1, inter alia, again itemizes those forms of information that are made visually perceptible and it must be pointed out that noticeably absent from the itemization of information that is visually available is that that information which may relate to traffic restrictions.

The drawings contained in the application clearly show that the only information that is made available for visual reference by the operator is that of the optimum OD route and/or the

estimated time of arrival. This can be seen by reference to Figures 8b, 9b and 10b, for example. There is no statement contained in the Desai et al. reference that individual traffic restrictions subject matter will be shown on the monitor of apparatus 250 nor is there any suggestion that any such information would be desired to have made into viewable form. Rather, all of the traffic restriction information disclosed in Desai et al. is subsumed into the apparatus with other information to arrive in unidentifiable form as part of the optimum OD route or optimum travel time between departure and arrival destination points.

Claim 1 of the application has been amended to recite that in applicant's invention the information concerning traffic restrictions which is part of the data record are displayed on the display unit. That is, the information is available to the automobile operator at all times. It is not incorporated merely as part of the total information that the apparatus uses to calculate a preferred destination route. Similarly, the remainder of the claims have been amended to overcome the rejections. All of the claims that are dependent either directly or indirectly from claim 1 of course contain the limitations of claim 1 and should be equally allowable. In review of the amendments made to the claims and for the reasons set forth above, it is believed that the primary Desai et al. reference fails to disclose or suggest an apparatus like that of Applicant where traffic restriction information is made available at all times in visual form to the operator. For this reason, reconsideration and notice of allowance of the claims are respectfully requested at this time.

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Respectfully submitted, APR 09 2002

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CLEAN VERSION OF AMENDED CLAIMS

Claim 1 (Rewritten)

B1

A navigation system for a motor vehicle containing a central processor connected to an input unit and to an output unit, to position determination means and to a storage element for map data, and means for associating an ascertained vehicle position with a data record, stored in the storage element, of the map data, wherein the storage element (5) stores information about traffic restrictions which is part of a data record of the map data, and traffic restrictions relevant to the ascertained vehicle position are displayed on the display unit (3; 19).

X

Claim 10 (Rewritten)

A2

A navigation system for a motor vehicle containing a central processor connected to an input unit and to an output unit, to position determination means and to a storage element for map data, and means for associating an ascertained vehicle position with a data record stored in the storage element of the map data, wherein the storage element (5) stores information about traffic restrictions which is part of a data record of the map data and traffic restrictions relevant to the ascertained vehicle position are displayed on the display unit (3, 9). A mobile telephone operably connected to the navigation system, whereby the information about traffic restrictions is retrievable from a stationary transmission station in a mobile radio network and is updateable.

Claim 11 (Amended)

The navigation system as defined in claim 8 wherein the map data and the information regarding traffic restrictions can be retrieved via the mobile telephone (22) from a stationary transmission station in a mobile radio network and can be transmitted to the storage element.

Ad cancel.

Claim 12 (Amended)

The navigation system as defined in claim 10 wherein the information regarding traffic restrictions is taken into account when calculating a route.

Claim 13 (Amended)

The navigation system as defined in claim 10 wherein the position determination means contain a receiver for satellite data (6).

Claim 14 (Amended)

The navigation system as defined in claim 10 wherein position determination is carried out by means of integrated navigation.

Claim 15 (Amended)

The navigation system as defined in claim 10, wherein the navigation system contains an audio output unit (4) and the traffic restrictions are output audibly.
